Index to Volume 114

The Auk 114(4):816–826, 1997

COMPILED BY JEFFREY S. MARKS AND KELLY A. CORLL

This index is confined primarily to new information. Previously published information referred to in this volume has not been indexed unless extensive comparisons or reinterpretations are involved. New specific and subspecific names are printed in **boldface** type.

Able, Kenneth P., review by, 534–535
Able, Kenneth P., William Brewster Memorial Award, 1996, 144–145
Adolfsson, Kristian, and Stefan Cherrug, Bird identification: A reference guide (rev.), 158–159
Aethopyga boltoni boltoni, 1–10
Aethopyga boltoni malindangensis, 1–10
Aethopyga boltoni tibolii, new subspecies, 1–10
Aethopyga linaraborae, new species, 1–10
Afton, Alan D., see McCracken, Kevin G., et al.
Age of first breeding in *Falco columbarius*, 288–290; *Recurvirostra americana*, 416–430
Age-specific migration in *Catharus ustulatus*, 695–707; *Dendroica magnolia*, 695–707; *Dumetella carolinensis*, 695–707; *Setophaga ruticilla*, 695–707; *Vireo griseus*, 695–707; *Vireo olivaceus*, 695–707
Age-specific reproduction in *Aphelocoma ultramarina*, 279–286; European ducks, 737–747
Aggression in *Formicarius* antthrushes, 780–785; turacos, 396–404
Aix sponsa, 479–487
Aldrich, John Warren, 1906–1995, In Memoriam, 748–751
Alisauskas, Ray T., see McCracken, Kevin G., et al.
Alsum, Sarah K., see Kennamer, Robert A., et al.
American Ornithologists' Union, William Brewster Memorial Award, 1996: Kenneth P. Able, 144–145; Elliot Coues Award, 1996: Ellen D. Ketterson, 145–146; Forty-first supplement to the American Ornithologists' Union *Check-list of North American Birds*, 542–552
Anas clypeata, 737–747
A. discors, 381–395
A. platyrhynchos, 242–248, 381–395
Andersen, Reidar, see Sæther, Bernt-Erik, et al.
Anderson, Bertin W., review by, 811–813
Anderson, David J., see Weathers, Wesley W., et al.
Anderson, Stanley H., see Gutzwiller, Kevin J., et al.
Anser anser, 140–141, 142–143
Anthonisen, Kristin, Christin Krokene, and Jan T. Lifjeld, Brood division is associated with fledgling dispersion in the Bluethroat (*Luscinia s. svecica*), 553–561
Anthus rubescens, 773–778
Antshrike, Eastern Slaty, 303–305; Large-tailed, 303–305
Antthrush, Black-faced, 780–785; Rufous-capped, 780–785; Such's, 303–305
Aphelocoma ultramarina, 279–286
Aquila chrysaetos, 673–687
Ardea fasciata, 303–305
Ardern, Simone L., Wei Ma, John G. Ewen, Doug P. Armstrong, and David M. Lambert, Social and sexual monogamy in translocated New Zealand Robin populations detected using minisatellite DNA, 120–126
Armstrong, Doug P., see Ardern, Simone L., et al.
Asio flammeus, 315–323
Avocet, American, 416–430
Aythya ferina, 737–747
A. fuligula, 737–747

Badyaev, Alexander V., and Elizabeth S. Leaf, Habitat associations of song characteristics in *Phylloscopus* and *Hippolais* warblers, 40–46
Baird, James, In Memoriam: Hustace H. Poor, 1914–1996, 287
Ballintijn, Mechteld R., and Carel ten Cate, Sex differences in the vocalizations and syrinx of the Collared Dove (*Streptopelia decaocto*), 22–39
Baltz, Michael E., see Latta, Steven C., and ——
Band recovery data, 93–102
Banks, Richard C., In Memoriam: John Warren Aldrich, 1906–1995, 748–751
Barbosa, Andrés, see Moreno, Juan, et al.
Barker, Richard J., see Krementz, David G., et al.
Barth, Edvard K., 1913–1996, In Memoriam, 501
Bates, John M., and Thomas S. Schulenberg, In Memoriam: Theodore A. Parker III, 1953–1993, 110
Bates, John M., see Hackett, Shannon J., and ——
Baumgartner, Frederick, M., 1910–1996, In Memoriam, 500
Beans, Bruce E., Eagle's plume: Preserving the life and habitat of America's Bald Eagle (rev.), 312–313
Beason, Robert C., Roswitha Wiltschko, and Wolfgang Wiltschko, Pigeon homing: Effects of magnetic pulses on initial orientation, 405–415
Beauchamp, Guy, Determinants of intraspecific brood amalgamation in waterfowl, 11–21
Behavior of *Aphelocoma ultramarina*, 279–286; *Catharacta maccormicki*, 638–645; *Centropus* spp., 800–

Index to Volume 114

The Auk 114(4):816–826, 1997

COMPILED BY JEFFREY S. MARKS AND KELLY A. CORLL

This index is confined primarily to new information. Previously published information referred to in this volume has not been indexed unless extensive comparisons or reinterpretations are involved. New specific and subspecific names are printed in **boldface** type.

Able, Kenneth P., review by, 534–535
Able, Kenneth P., William Brewster Memorial Award, 1996, 144–145
Adolfsson, Kristian, and Stefan Cherrug, Bird identification: A reference guide (rev.), 158–159
Aethopyga boltoni boltoni, 1–10
Aethopyga boltoni malindangensis, 1–10
Aethopyga boltoni tibolii, new subspecies, 1–10
Aethopyga linaraborae, new species, 1–10
Afton, Alan D., see McCracken, Kevin G., et al.
Age of first breeding in *Falco columbarius*, 288–290; *Recurvirostra americana*, 416–430
Age-specific migration in *Catharus ustulatus*, 695–707; *Dendroica magnolia*, 695–707; *Dumetella carolinensis*, 695–707; *Setophaga ruticilla*, 695–707; *Vireo griseus*, 695–707; *Vireo olivaceus*, 695–707
Age-specific reproduction in *Aphelocoma ultramarina*, 279–286; European ducks, 737–747
Aggression in *Formicarius* antthrushes, 780–785; turacos, 396–404
Aix sponsa, 479–487
Aldrich, John Warren, 1906–1995, In Memoriam, 748–751
Alisauskas, Ray T., see McCracken, Kevin G., et al.
Alsum, Sarah K., see Kennamer, Robert A., et al.
American Ornithologists' Union, William Brewster Memorial Award, 1996: Kenneth P. Able, 144–145; Elliot Coues Award, 1996: Ellen D. Ketterson, 145–146; Forty-first supplement to the American Ornithologists' Union *Check-list of North American Birds*, 542–552
Anas clypeata, 737–747
A. discors, 381–395
A. platyrhynchos, 242–248, 381–395
Andersen, Reidar, see Sæther, Bernt-Erik, et al.
Anderson, Bertin W., review by, 811–813
Anderson, David J., see Weathers, Wesley W., et al.
Anderson, Stanley H., see Gutzwiller, Kevin J., et al.
Anser anser, 140–141, 142–143
Anthonisen, Kristin, Christin Krokene, and Jan T. Lifjeld, Brood division is associated with fledgling dispersion in the Bluethroat (*Luscinia s. svecica*), 553–561
Anthus rubescens, 773–778
Antshrike, Eastern Slaty, 303–305; Large-tailed, 303–305
Antthrush, Black-faced, 780–785; Rufous-capped, 780–785; Such's, 303–305
Aphelocoma ultramarina, 279–286
Aquila chrysaetos, 673–687
Ardea fasciata, 303–305
Ardern, Simone L., Wei Ma, John G. Ewen, Doug P. Armstrong, and David M. Lambert, Social and sexual monogamy in translocated New Zealand Robin populations detected using minisatellite DNA, 120–126
Armstrong, Doug P., see Ardern, Simone L., et al.
Asio flammeus, 315–323
Avocet, American, 416–430
Aythya ferina, 737–747
A. fuligula, 737–747

Badyaev, Alexander V., and Elizabeth S. Leaf, Habitat associations of song characteristics in *Phylloscopus* and *Hippolais* warblers, 40–46
Baird, James, In Memoriam: Hustace H. Poor, 1914–1996, 287
Ballintijn, Mechteld R., and Carel ten Cate, Sex differences in the vocalizations and syrinx of the Collared Dove (*Streptopelia decaocto*), 22–39
Baltz, Michael E., see Latta, Steven C., and ——
Band recovery data, 93–102
Banks, Richard C., In Memoriam: John Warren Aldrich, 1906–1995, 748–751
Barbosa, Andrés, see Moreno, Juan, et al.
Barker, Richard J., see Krementz, David G., et al.
Barth, Edvard K., 1913–1996, In Memoriam, 501
Bates, John M., and Thomas S. Schulenberg, In Memoriam: Theodore A. Parker III, 1953–1993, 110
Bates, John M., see Hackett, Shannon J., and ——
Baumgartner, Frederick, M., 1910–1996, In Memoriam, 500
Beans, Bruce E., Eagle's plume: Preserving the life and habitat of America's Bald Eagle (rev.), 312–313
Beason, Robert C., Roswitha Wiltschko, and Wolfgang Wiltschko, Pigeon homing: Effects of magnetic pulses on initial orientation, 405–415
Beauchamp, Guy, Determinants of intraspecific brood amalgamation in waterfowl, 11–21
Behavior of *Aphelocoma ultramarina*, 279–286; *Catharacta maccormicki*, 638–645; *Centropus* spp., 800–

801; *Corvus brachyrhynchos*, 296–298, 628–637; *Ficedula hypoleuca*, 112–115, 792–796; forest passerines, 55–65; *Formicarius* spp.; *Icteria virens*, 503–506; *Loxia leucoptera*, 163–178; *Luscinia svecica*, 553–561; *Melanerpes carolinus*, 778–780; *Parus atricapillus*, 298–299; *Picoides borealis*, 778–780; *Porphyrio porphyrio*, 291–295; *Psarocolius montezuma*, 570–580; *Pygoscelis adeliae*, 638–645; *Pygoscelis antarctica*, 47–54; *Recurvirostra americana*, 416–430; *Sitta canadensis*, 298–299; *Tachycineta bicolor*, 668–672; *Vanellus coronatus*, 717–724

Beletsky, Les D., and Gordon H. Orians, Red-winged Blackbirds: Decision-making and reproductive success (rev.), 805–807

Bell, Jennifer L., and Robert C. Whitmore, Eastern Towhee numbers increase following defoliation by gypsy moths, 708–716

Belton, William, review by, 308–309

Benkman, Craig W., Feeding behavior, flock-size dynamics, and variation in sexual selection in crossbills, 163–178

Bennett, Alan J., see Johnson, Oscar W., et al.

Bennett, Darin C., Maryanne R. Hughes, Cristina N. De Sobrino, and David A. Gray, Interaction of osmotic and volemic components in initiating salt-gland secretion in Pekin Ducks, 242–248

Berthold, Peter, Control of bird migration (rev.), 534–535

Birkhead, T. R., J. V. Briskie, J. T. Lifjeld, and T. Slagsvold, Breeding-cycle patterns of sperm storage in the Pied Flycatcher (*Ficedula hypoleuca*), 792–796

Bishop, Mary Anne, see Butler, Robert W., et al.

Bishop, Mary Anne, see Johnson, Oscar W., et al.

Blood parasites, 179–191

Bluebird, Mountain, 443–455; Western, 646–656

Bluethroat, 553–561

Blums, Peter, Gary R. Hepp, and Aivars Mednis, Age-specific reproduction in three species of European ducks, 737–747

Bobwhite, Northern, 103–109, 688–694

Bock, Walter J., review by, 531–534

Braden, Gerald T., Robert L. McKernan, and Shawn M. Powell, Association of within-territory vegetation characteristics and fitness components of California Gnatcatchers, 601–609

Bradley, Mark, Robin Johnstone, Gordon Court, and Tom Duncan, Influence of weather on breeding success of Peregrine Falcons in the arctic, 786–791

Brant, Black, 129–132

Branta bernicla, 129–132

Breeding biology of *Anas clypeata*, 737–747; *Anas discors*, 381–395; *Anas platyrhynchos*, 381–395; *Anthus rubescens*, 773–778; *Aphelocoma ultramarina*, 279–286; *Aythya ferina*, 737–747; *Aythya fuligula*, 737–747; *Branta bernicla*, 129–132; *Catharacta maccormicki*, 638–645; *Corvus corax*, 116–120; *Dendroica petechia*, 212–220; *Dendroica townsendi*, 657–667; *Falco columbarius*, 288–290; *Falco peregrinus*, 786–791; *Ficedula hypoleuca*, 112–115, 792–796; *Icteria virens*, 503–506; *Luscinia svecica*, 553–561; *Melanerpes carolinus*, 778–780; *Milvus migrans*, 192–199; *Molothrus ater*, 212–220; *Myiarchus cinerascens*, 646–656; *Pachyptila desolata*, 725–736; *Parus atricapillus*, 769–773; *Parus inornatus*, 646–656; *Pelecanoides georgicus*, 725–736; *Petroica australis*, 120–126; *Picoides borealis*, 778–780; *Polioptila californica*, 324–332, 601–609; *Porphyrio porphyrio*, 291–295; *Pygoscelis adeliae*, 638–645; *Pygoscelis antarctica*, 47–54; *Recurvirostra americana*, 416–430; *Sialia currucoides*, 443–455; *Sialia mexicana*, 646–656; *Sterna paradisaea*, 524–530; *Tachycineata bicolor*, 443–455, 668–672; *Thalassoica antarctica*, 333–340; *Troglodytes aedon*, 646–656; *Turdus migratorius*, 593–600; *Tyto alba*, 581–592; *Vanellus coronatus*, 717–724; *Vanellus vanellus*, 507–512; waterfowl, 11–21

Breeding Bird Survey, 74–92

Breitwisch, Randall, see Linville, Susan U., and ——

Brewster Memorial Award, 1996: Kenneth P. Able, 144–145

Briskie, J. V., see Birkhead, T. R., et al.

Brood amalgamation in waterfowl, 11–21

Brood division in *Luscinia svecica*, 553–561

Brood reduction, 137–140

Brown, Esther R., see Brown, Jerram L., et al.

Brown, Glen, see Leonard, Marty L., et al.

Brown, Jerram L., Esther R. Brown, Joseph Sedransk, and Shannon Ritter, Dominance, age, and reproductive success in a complex society: A long-term study of the Mexican Jay, 279–286

Brown, T. K., see Inouye, C. Y., et al.

Bubo virginianus, 315–323

Bunting, Indigo, 179–191; Painted, 179–191

Burger, Joanna, see Nettleship, David N., et al.

Burger, Michael F., Estimating lipid and lean masses in a wintering passerine: An evaluation of TOBEC, 762–769

Burhans Dirk E., and Phillip C. Freeman, Partial rejection of immaculate foreign eggs by Yellow-breasted Chats, 503–506

Burtt, Edward H., Jr., In Memoriam: Merrill Wood, 1908–1992, 111

Butler, Robert W., Tony D. Williams, Nils Warnock, and Mary Anne Bishop, Wind assistance: A requirement for migration of shorebirds?, 456–466

Byers, Clive, Jon Curson, and Urban Olsson, Sparrows and buntings: A guide to the sparrows and buntings of North America and the world (rev.), 310

Caccamise, Donald F., Lisa M. Reed, Jerzy Romanowski, and Philip C. Stouffer, Roosting behavior and group territoriality in American Crows, 628–637

Cain, Steven L., see Dunk, Jeffrey R., et al.

Calcium uptake in *Taeniopygia guttata*, 562–569

Calidris mauri, 456–466
Camphuysen, Kees, and Theunis Piersma, review by, 813–815
Caparroz, Renato, see Miyaki, Cristina Y., et al.
Cardinal, Northern, 179–191, 762–769, 796–800
Cardinalis cardinalis, 179–191, 762–769, 796–800
Carey, Cynthia (Ed.), Avian energetics and nutritional ecology (rev.), 803
Carotenoids in *Cardinalis cardinalis*, 796–800
Carter, William A., In Memoriam: Frederick M. Baumgartner, 1910–1996, 500
Catbird, Gray, 179–191, 695–707
Catharacta maccormicki, 638–645
Catharus fuscescens, 179–191, 263–278
C. minimus, 263–278
C. ustulatus, 179–191, 263–278, 695–707
Census methods, 74–92
Centropus grillii, 800–801
C. toulou, 800–801
Chamaeza meruloides, 303–305
Chantler, Phil, and Gerald Driessens, Swifts: A guide to the swifts and treeswifts of the world (rev.), 152–154
Chase, Mary K., Nadav Nur, and Geoffrey R. Geupel, Survival, productivity, and abundance in a Wilson's Warbler population, 354–366
Chat, Yellow-breasted, 503–506
Check-list of North American Birds, forty-first supplement, 542–552
Cheke, Robert A., review by, 310–311
Chelgren, Nathan, see Sedinger, James S., et al.
Chen caerulescens, 229–241, 610–618
C. rossii, 610–618
Cherrug, Stefan, see Adolfsson, Kristian, and ——
Chiappe, Luis, Mark Norell, and James Clark, *Mononykus* and birds: Methods and evidence, 300–302
Chickadee, Black-capped, 298–299, 431–442, 769–773; Carolina, 179–191
Chilton, Glen, review by, 309–310
Choi, In-Ho, and Robert E. Ricklefs, Changes in protein and electrolyte concentrations in the pectoral and leg muscles during avian development, 688–694
Christman, Beth J., and André A. Dhondt, Nest predation in Blacked-capped Chickadees: How safe are cavity nests?, 769–773
Cichlocolaptes leucophrus, 303–305
Clark, James, see Chiappe, Luis, et al.
Clark, Robert G., see Gloutney, Mark L., and ——
Clark, William S., see Wheeler, Brian K., and ——
Clutch size in *Anas clypeata*, 737–747; *Anthus rubescens*, 773–778; *Aythya ferina*, 737–747; *Aythya fuligula*, 737–747; *Falco peregrinus*, 786–791; *Milvus migrans*, 192–199; *Tyto alba*, 581–592
Clutch size, latitudinal variation, 773–778
Colinus virginianus, 103–109, 688–694
Collar, Nigel J., M. J. Crosby, and A. J. Stattersfield, Birds to watch 2. The world list of threatened birds (rev.), 159
Collins, Charles T., review by, 152–154
Columba livia, 405–415
Colwell, Sheila V., see Kennamer, Robert A., et al.
Commentaries, Is the energy cost of begging by nestling passerines surprisingly low?, see Weathers et al.; Is begging cheap?, see Verhulst and Wiersma; The role of energetic costs in the evolution of begging behavior of nestling passerines, see McCarty; Double jeopardy and the parameterization of brood reduction models: A comment on Mock and Forbes (1994), see Stoleson; Abiotic factors and preroosting behavior of Greylag Geese: A comment, see Reebs; Abiotic factors and preroosting behavior of Greylag Geese: Response to Reebs, see Schmitt; *Mononykus* and birds: Methods and evidence, see Chiappe et al.; Population limitation in Neotropical migratory birds: Comments on Rappole and McDonald (1994), see Latta and Baltz
Communal roosting in *Corvus brachyrhynchos*, 628–637
Competition and cavity kleptoparasitism in *Melanerpes carolinus*, 778–780; *Picoides borealis*, 778–780
Connecticut, *Parus atricapillus*, 431–442
Connors, Peter G., review by, 536–537
Coragyps atratus, 513
Cormorant, Double-crested, 467–478
Corvus brachyrhynchos, 296–298, 628–637
C. corax, 116–120
Corythaeola cristata, 200–211, 396–404
Cottridge, David, see Rosair, David, and ——
Coturnix coturnix, 688–694
Coucal, Black, 800–801; Madagascar, 800–801
Coues Award, 1996: Ellen D. Ketterson, 145–146
Court, Gordon, see Bradley, Mark, et al.
Cowbird, Brown-headed, 66–73, 212–220, 503–506
Cristol, Daniel A., Paul. V. Switzer, Kara L. Johnson, and Leah S. Walke, Crows do not use automobiles as nutcrackers: Putting an anecdote to the test, 296–298
Crosby, M. J., see Collar, Nigel J., et al.
Crossbill, White-winged, 163–178
Crow, American, 296–298, 628–637
Curson, Jon, see Byers, Clive, et al.

Dabbert, C. B., R. L. Lochmiller, and R. G. Teeter, Effects of acute thermal stress on the immune system of the Northern Bobwhite (*Colinus virginianus*), 103–109
Dale, Svein, see Lifjeld, Jan T., et al.
Davies, S. J. J. F., see Higgins, Peter J., and ——
Demography of *Parus atricapillus*, 431–442; *Polioptila californica*, 601–609; *Sialia currucoides*, 443–455; *Tachycineta bicolor*, 443–455; *Tyto alba*, 581–592; waterfowl, 93–102; *Wilsonia pusilla*, 354–366
Dendroica coronata, 55–65
D. magnolia, 695–707

D. petechia, 212–220, 367–380
D. townsendi, 657–667
De Sobrino, Cristina N., see Bennett, Darin C., et al.
Dhondt, André A., see Christman, Beth J., and ——
Dickerman, Robert W., and Amadeo M. Rea, In Memoriam: Allan R. Phillips, 1914–1996, 496–499
Diet of *Cardinalis cardinalis*, 796–800; *Corythaeola cristata*, 200–211, 396–404; *Musophaga johnstoni*, 200–211, 396–404; *Tauraco schuettii*, 200–211, 396–404
Dispersal in *Recurvirostra americana*, 416–430
Diving-Petrel, South Georgia, 725–736
DNA analysis in *Ficedula hypoleuca*, 112–115; *Lanius ludovicianus*, 126–129; owls, 315–323; parrots, 516–520; *Petroica australis*, 120–126
Dominance in *Aphelocoma ultramarina*, 279–286
Dove, Collared, 22–39
Downs, Colleen T., and David Ward, Does shading behavior of incubating shorebirds in hot environments cool the eggs or the adults?, 717–724
Driessens, Gerald, see Chantler, Phil, and ——
Droege, S., see Ralph, C. John, et al.
Duarte, J. Maurício B., see Miyaki, Cristina Y., et al.
Duck, Pekin, 242–248; Tufted, 737–747; Wood, 479–487
Dumetella carolinensis, 179–191, 695–707
Duncan, Tom, see Bradley, Mark, et al.
Dunk, Jeffrey R., Roger N. Smith, and Steven L. Cain, Nest-site selection and reproductive success in Common Ravens, 116–120

Eagle, Golden, 673–687
Eck, Siegfried, see Martens, Jochen, and ——
Egg composition in *Aix sponsa*, 479–487
Egg laying in *Aix sponsa*, 479–487; *Ficedula hypoleuca*, 792–796; *Milvus migrans*, 192–199
Egg nutrients in Great Lakes water birds, 467–478
Egg rejection by *Icteria virens*, 503–506
Egg size in *Aix sponsa*, 479–487; *Milvus migrans*, 192–199; *Sterna paradisaea*, 524–530; *Vanellus vanellus*, 507–512
Eggshell formation in *Taeniopygia guttata*, 562–569
Eggshell strength in *Molothrus ater*, 66–73; passerines, 66–73
Eichholz, Michael, see Sedinger, James S., et al.
Electrolytes in muscle of *Colinus virginianus*, 688–694; *Coturnix coturnix*, 688–694; *Sturnus vulgaris*, 688–694
Ellegren, Hans, see Lifjeld, Jan T., et al.
Ellis, David H., George F. Gee, and Claire M. Mirande (Eds.), Cranes: Their biology, husbandry, and conservation (rev.), 807–810
Energetics, begging behavior, 133, 134, 135–137; *Sporophila* spp., 341–353
Espie, Richard H. M., see Lieske, David J., et al.
Evans, M. I. (Compiler), Important bird areas in the Middle East (rev.), 159
Ewen, John G., see Ardern, Simone L., et al.
Ewins, Peter J., see Hobson, Keith A., et al.
Extrapair mating in *Ficedula hypoleuca*, 112–115

Falco columbarius, 288–290
F. peregrinus, 786–791
Falcon, Peregrine, 786–791
Fat loads in *Calidris mauri*, 456–466; *Catharus fuscescens*, 263–278; *Catharus minimus*, 263–278; *Catharus ustulatus*, 263–278; *Hylocichla mustelina*, 263–278
Feduccia, Alan, The origin and evolution of birds (rev.), 531–534
Fernandez, Nicole, see Leonard, Marty L., et al.
Ficedula hypoleuca, 112–115, 792–796
Finch, Zebra, 562–569
Flight performance of *Calidris mauri*, 456–466
Flight range, *Calidris mauri*, 456–466
Flock size in *Loxia leucoptera*, 163–178
Flooding, effects on *Dendroica petechia*, 367–380; *Geothlypis trichas*, 367–380; *Myiarchus crinitus*, 367–380; *Pheucticus ludovicianus*, 367–380; *Protonotaria citrea*, 367–380; *Tachycineta bicolor*, 367–380; *Troglodytes aedon*, 367–380
Floodplain forest, abundance and species richness, 367–380
Flowers, Charles, see Harrington, Brian, and ——
Fluctuating asymmetry in *Gallus gallus*, 221–228
Flycatcher, Ash-throated, 646–656; Great Crested, 367–380; Pied, 112–115, 792–796
Food availability in *Wilsonia citrina*, 619–627
Food begging in *Tachycineta bicolor*, 668–672
Foraging of *Aquila chrysaetos*, 673–687; *Corvus brachyrhynchos*, 296–298; *Dendroica townsendi*, 657–667; *Loxia leucoptera*, 163–178; *Parus atricapillus*, 298–299; *Psarocolius montezuma*, 570–580; *Sitta canadensis*, 298–299; turacos, 200–211, 396–404
Formicarius analis, 780–785
F. colma, 780–785
Freeman, Phillip C., see Burhans, Dirk E., and ——
Furness, Robert W., review by, 157

Gallus gallus, 221–228
Garrett, Kimball L., review by, 306–307
Garvin, Mary C., and J. V. Remsen, Jr. An alternative hypothesis for heavier parasite loads of brightly colored birds: Exposure at the nest, 179–191
Gauthier, Gilles, see Lesage, Louis, and ——
Gee, George F., see Ellis, David H., et al.
Geothlypis trichas, 367–380
Geupel, Geoffrey R., see Chase, Mary K., et al.
Girard, I., see Inouye, C. Y., et al.
Givnish, Thomas J., see Sun, Chin, et al.
Gloutney, Mark L., and Robert G. Clark, Nest-site selection by Mallards and Blue-winged Teal in relation to microclimate, 381–395
Gnatcatcher, California, 324–332, 601–609
Gochfeld, Michael, see Nettleship, David N., et al.
Godfrey, Earl, review by, 815
Golden-Plover, Pacific, 521–524
Gonzales, Pedro C., see Kennedy, Robert S., et al.
Goose, Greylag, 140–141, 142–143; Ross', 610–618; Snow, 229–241, 610–618

Goss-Custard, John D., (Ed.), The Oystercatcher: From individuals to populations (rev.), 810–811
Grackle, Boat-tailed, 179–191; Common, 179–191
Gray, David A., see Bennett, Darin C., et al.
Grimes, Samuel A., 1906–1996, In Memoriam, 753
Grønstøl, Gaute Bø, Correlates of egg-size variation in polygynously breeding Northern Lapwings, 507–512
Grosbeak, Rose-breasted, 179–191, 367–380
Growth in *Branta bernicla*, 129–132; *Chen caerulescens*, 229–241; *Pachyptila desolata*, 725–736; *Pelecanoides georgicus*, 725–736; *Pygoscelis antarctica*, 47–54; *Sterna paradisaea*, 524–530
Gull, Herring, 467–478
Gutzwiller, Kevin J., Elizabeth A. Kroese, Stanley H. Anderson, and Charles A. Wilkins, Does human intrusion alter the seasonal timing of avian song during breeding periods?, 55–65
Gypsy moths and *Pipilo erythrophthalmus*, 708–716

Habitat use by *Aquila chrysaetos*, 673–687; *Dendroica townsendi*, 657–667; *Hippolais* spp., 40–46; *Phylloscopus*, spp. 40–46; *Pipilo erythrophthalmus*, 708–716; *Polioptila californica*, 601–609; *Sialia currucoides*, 443–455; *Tachycineta bicolor*, 443–455
Hackett, Shannon J., and John M. Bates, review by, 802–803
Haftorn, Svein, In Memoriam: Edvard K. Barth, 1913–1996, 501
Haftorn, Svein, In Memoriam: Holger Holgersen, 1914–1996, 502
Hagelin, Julie C., and Gary D. Miller, Nest-site selection in South Polar Skuas: Balancing nest safety and access to resources, 638–645
Handel, Colleen M., see Matsuoka, Steven M., et al.
Harrington, Brian, and Charles Flowers, The flight of the Red Knot: A natural history account of a small bird's annual migration from the Arctic Circle to the tip of South America and back (rev.), 536–537
Hatching asynchrony in *Milvus migrans*, 192–199; *Turdus migratorius*, 593–600
Hawk-Owl, Philippine, 315–323
Hayse, D., see Inouye, C. Y., et al.
Heath, M. F., see Tucker, G. M., and ——
Heinrich, Bernd, Chris C. Joerg, Sean S. Madden, and Emory W. Sanders, Jr., Black-capped Chickadees and Red-breasted Nuthatches "weigh" sunflower seeds, 298–299
Hendricks, Paul, Geographical trends in clutch size: A range-wide relationship with laying date in American Pipits, 773–778
Hepp, Gary R., review by, 538–539
Hepp, Gary R., see Blums, Peter, et al.
Hertel, F. see Inouye, C. Y., et al.
Higgins, Peter J., and S. J. J. F. Davies (Eds.), Handbook of Australian, New Zealand and Antarctic birds. Volume 3, Snipe to Pigeons (rev.), 813–815
Hillis, David M., Craig Moritz, and Barbara K. Mable (Eds.), Molecular systematics (rev.), 802–803
Hines, James E., see Loery, Gordon, et al.
Historic account of *Coragyps atratus*, 513
Hobson, Keith A., Kimberley D. Hughes, and Peter J. Ewins, Using stable-isotope analysis to identify endogenous and exogenous sources of nutrients in eggs of migratory birds: Applications to Great Lakes contaminants research, 467–478
Hodum, Peter J., see Weathers, Wesley W., et al.
Holgersen, Holger, 1914–1996, In Memoriam, 502
Holt, Rachel F., and Kathy Martin, Landscape modification and patch selection: The demography of two secondary cavity nesters colonizing clearcuts, 443–455
Host-egg removal by *Molothrus ater*, 212–220
Hughes, Kimberley D., see Hobson, Keith A., et al.
Hughes, Maryanne R., see Bennett, Darin C., et al.
Human influence on avian song, 55–65
Hylocichla mustelina, 179–191, 263–278

Icteria virens, 503–506
Icterus spurius, 179–191
Igl, Lawrence D., and Douglas H. Johnson, Changes in breeding bird populations in North Dakota: 1967 to 1992–93, 74–92
Immune-system function in *Colinus virginianus*, 103–109
Incubation in *Dendroica petechia*, 212–220; *Milvus migrans*, 192–199; *Vanellus coronatus*, 717–724
Inouye, C. Y., I. Girard, T. K. Brown, D. Hayse, F. Hertel, and K. A. Nagy, review by, 803
Insecticides, effects on *Wilsonia citrina*, 619–627

James, Paul C., see Lieske, David J., et al.
Jamieson, Ian G., and James S. Quinn, Problems with removal experiments designed to test the relationship between paternity and parental effort in a socially polyandrous bird, 291–295
Janes, Donald N., Osmoregulation by Adélie Penguin chicks on the Antarctic Peninsula, 488–495
Jay, Mexican, 279–286
Joerg, Chris C., see Heinrich, Bernd, et al.
Johnson, Douglas H., see Igl, Lawrence D., and ——
Johnson, Kara L., see Cristol, Daniel A., et al.
Johnson, Oscar W., Nils Warnock, Mary Anne Bishop, Alan J. Bennett, Patricia M. Johnson, and Ronald J. Kienholz, Migration by radio-tagged Pacific Golden-Plovers from Hawaii to Alaska, and their subsequent survival, 521–524
Johnson, Patricia M., see Johnson, Oscar W., et al.
Johnstone, Robin, see Bradley, Mark, et al.
Junco, Dark-eyed, 55–65
Junco hyemalis, 55–65
Junglefowl, Red, 221–228

Kappes, John J., Jr., Defining cavity-associated interactions between Red-cockaded Woodpeckers and other cavity-dependent species: Interspecif-

ic competition or cavity kleptoparasitism?, 778–780
Kaufman, Kenn, Lives of North American birds (rev.), 539–540
Keith, Stuart, review by, 155–156
Kemp, Alan, The Hornbills: Bucerotiformes (rev.), 538
Kennamer, Robert A., Sarah K. Alsum, and Sheila V. Colwell, Composition of Wood Duck eggs in relation to egg size, laying sequence, and skipped days of laying, 479–487
Kennedy, Robert S., Pedro C. Gonzales, and Hector C. Miranda, Jr., New *Aethopyga* sunbirds (Aves: Nectariniidae) from the island of Mindanao, Philippines, 1–10
Kennedy, Robert S., see Miranda, Hector C., et al.
Ketterson, Ellen D., Elliot Coues Award, 1996, 145–146
Kienholz, Ronald J., see Johnson, Oscar W., et al.
Kimball, Rebecca T., J. David Ligon, and Michele Merola-Zwartjes, Testicular asymmetry and secondary sexual characters in Red Junglefowl, 221–228
Kinglet, Ruby-crowned, 55–65
Kite, Black, 192–199
Klaas, Erwin E., see Knutson, Melinda G., and ——
Knick, Steven T., see Marzluff, John M., et al.
Knutson, Melinda G., and Erwin E. Klaas, Declines in abundance and species richness of birds following a major flood on the Upper Mississippi River, 367–380
Krementz, David G., Richard J. Barker, and James D. Nichols, Sources of variation in waterfowl survival rates, 93–102
Kroese, Elizabeth A., see Gutzwiller, Kevin J., et al.
Krokene, Christin, see Anthonisen, Kristin, et al.
Kroodsma, Donald E., and Edward H. Miller (Eds.), Ecology and evolution of acoustic communication in birds (rev.), 804–805

Lambert, David M., see Ardern, Simone L., et al.
Lanius ludovicianus, 126–129
Lapwing, Northern, 507–512
LaRoe, Edward T. III, see Noss, Reed F., et al.
Larus argentatus, 467–478
Latta, Steven C., and Michael E. Baltz, Population limitation in Neotropical migratory birds: Comments on Rappole and McDonald (1994), 754–762
Laying date in *Anthus rubescens*, 773–778
Leaf, Elizabeth S., see Badyaev, Alexander V., and ——
Leonard, Marty L., Nicole Fernandez, and Glen Brown, Parental calls and nestling behavior in Tree Swallows, 668–672
Lesage, Louis, and Gilles Gauthier, Growth and organ development in Greater Snow Goose goslings, 229–241
Lieske, David J., Lynn W. Oliphant, Paul C. James, Ian G. Warkentin, and Richard H. M. Espie, Age of first breeding in Merlins (*Falco columbarius*), 288–290
Lifetime reproductive success in *Tyto alba*, 581–592
Lifjeld, Jan T., see Anthonisen, Kristin, et al.
Lifjeld, Jan T., see Birkhead, T. R., et al.
Lifjeld, Jan T., Tore Slagsvold, Svein Dale, and Hans Ellegren, A sexually selected paradox in the Pied Flycatcher: Attractive males are cuckolded, 112–115
Ligon, J. David, A single functional testis as a unique proximate mechanism promoting sex-role reversal in coucals, 800–801
Ligon, J. David, see Kimball, Rebecca T., et al.
Lindberg, Mark S., see Sedinger, James S., et al.
Linville, Susan U., and Randall Breitwisch, Carotenoid availability and plumage coloration in a wild population of Northern Cardinals, 796–800
Lipid mass in *Cardinalis cardinalis*, 762–769
Littlefield, Carroll D., review by, 807–810
Lochmiller, R. L., see Dabbert, C. B., et al.
Loery, Gordon, James D. Nichols, and James E. Hines, Capture-recapture analysis of a wintering Black-capped Chickadee population in Connecticut, 1958–1993, 431–442
Lohrer, Fred J., see Yosef, Reuven, and ——
Lorentsen, Svein-Håkon, see Sæther, Bernt-Erik, et al.
Loxia leucoptera, 163–178
Luscinia svecica, 553–561

Ma, Wei, see Ardern, Simone L., et al.
Mable, Barbara K., see Hillis, David M., et al.
Mace, Terrence R., review by, 156
Mackenziaena leachii, 303–305
Madden, Sean S., see Heinrich, Bernd, et al.
Magnetic pulses and orientation in *Columba livia*, 405–415
Mallard, 381–395
Martens, Jochen, and Siegfried Eck, Towards an ornithology of the Himalayas: Systematics, ecology, and vocalizations of Nepal birds (rev.), 311–312
Marti, Carl D., Lifetime reproductive success in Barn Owls near the limit of the species' range, 581–592
Martin, Kathy, see Holt, Rachel F., and ——
Martínez del Rio, Carlos, Can passerines synthesize vitamin C?, 513–516
Marzluff, John M., Steven T. Knick, Mark S. Vekasy, Linda S. Schueck, and Thomas J. Zarriello, Spatial use and habitat selection of Golden Eagles in southwestern Idaho, 673–687
Mate choice in *Ficedula hypoleuca*, 112–115; *Petroica australis*, 120–126; *Psarocolius montezuma*, 570–580
Mating system in *Porphyrio porphyrio*, 291–295; *Vanellus vanellus*, 507–512
Matsuoka, Steven M., Colleen M. Handel, Daniel D. Roby, and Dana L. Thomas, The relative impor-

tance of nesting and foraging sites in selection of breeding territories by Townsend's Warblers, 657–667
McCarty, John P., The role of energetic costs in the evolution of begging behavior of nestling passerines, 135–137
McCracken, Kevin G., Alan D. Afton, and Ray T. Alisauskas, Nest morphology and body size of Ross' Geese and Lesser Snow Geese, 610–618
McKernan, Robert L., see Braden, Gerald T., et al.
McMaster, D. Glen, and Spencer G. Sealy, Host-egg removal by Brown-headed Cowbirds: A test of the host incubation limit hypothesis, 212–220
Mednis, Aivars, see Blums, Peter, et al.
Melanerpes carolinus, 778–780
Memorial of John Warren Aldrich, 748–751; Edvard K. Barth, 501; Frederick M. Baumgartner, 500; Samuel A. Grimes, 753; Holger Holgersen, 502; Theodore A. Parker III, 110; Allan R. Phillips, 496–499; Hustace H. Poor, 287; Beatrice Wetmore, 751–753; Merrill Wood, 111
Merino, Santiago, see Moreno, Juan, et al.
Merlin, 288–290
Merola-Zwartjes, Michele, see Kimball, Rebecca, et al.
Microsatellite DNA, 112–115, 126–129
Migration of *Calidris mauri*, 456–466; *Catharus fuscescens*, 263–278; *Catharus minimus*, 263–278; *Catharus ustulatus*, 263–278, 695–707; *Dendroica magnolia*, 695–707; *Dumetella carolinensis*, 695–707; *Hylocichla mustelina*, 263–278; *Pluvialis fulva*, 521–524; *Setophaga ruticilla*, 695–707; *Stelgidopteryx serripennis*, 249–262; *Vireo griseus*, 695–707; *Vireo olivaceus*, 695–707
Miller, Edward H., see Kroodsma, Donald E., and ——
Miller, Gary D., see Hagelin, Julie C., and ——
Milvus migrans, 192–199
Mimizuku gurneyi, 315–323
Mindell, David P., see Miranda, Hector C., et al.
Minisatellite DNA, 120–126, 516–520
Miranda, Hector C., Jr., Robert S. Kennedy, and David P. Mindell, Phylogenetic placement of *Mimizuku gurneyi* (Aves: Strigidae) inferred from mitochondrial DNA, 315–323
Miranda, Hector C., Jr., see Kennedy, Robert S., et al.
Mirande, Claire M., see Ellis, David H., et al.
Mitochondrial DNA, owls, 315–323
Miyaki, Cristina Y., J. Maurício B. Duarte, Renato Caparroz, Adauto L. V. Nunes, and Anita Wajntal, Sex identification of South American parrots (Psittacidae, Aves) using the human minisatellite probe 33.15, 516–520
Mlikovsky, Jiri, Tertiary avian localities of Europe (rev.), 537–538
Moermond, Timothy C., see Sun, Chin, and ——
Moermond, Timothy C., see Sun, Chin, et al.
Molothrus ater, 66–73, 212–220, 503–506
Molt in *Stelgidopteryx serripennis*, 249–262
Monogamy in *Petroica australis*, 120–126
Mononykus, 300–302
Moore, Frank R., see Woodrey, Mark, and ——
Moore, Frank R., see Yong, Wang, and ——
Moreno, Juan, Andrés Barbosa, Jaime Potti, and Santiago Merino, The effects of hatching date and parental quality on chick growth and creching age in the Chinstrap Penguin (*Pygoscelis antarctica*): A field experiment, 47–54
Moritz, Craig, see Hillis, David M., et al.
Morphology of *Aethopyga* sunbirds, 1–10; *Catharus fuscescens*, 263–278; *Catharus minimus*, 263–278; *Catharus ustulatus*, 263–278; *Centropus* spp., 800–801; *Chen caerulescens*, 229–241, 610–618; *Chen rossii*, 610–618; *Gallus gallus*, 221–228; *Hylocichla mustelina*, 263–278; *Streptopelia decaocto*, 22–39
Mundy, Nicholas I., Philip Unitt, and David S. Woodruff, Skin from feet of museum specimens as a non-destructive source of DNA for avian genotyping, 126–129
Muscle composition in *Colinus virginianus*, 688–694; *Coturnix coturnix*, 688–694; *Sturnus vulgaris*, 688–694
Musophaga johnstoni, 200–211, 396–404
Myiarchus cinerascens, 646–656
M. crinitus, 367–380

Nagy, K. A., see Inouye, C. Y., et al.
Nagy, Laura A., and Kimberly G. Smith, Effects of a insecticide-induced reduction in lepidopteran larvae on the reproductive success of Hooded Warblers, 619–627
Natal dispersal in *Recurvirostra americana*, 416–430
Nest-box use by *Myiarchus cinerascens*, 646–656; *Parus inornatus*, 646–656; *Sialia mexicana*, 646–656; *Troglodytes aedon*, 646–656
Nest microclimate in *Anas discors*, 381–395; *Anas platyrhynchos*, 381–395
Nest morphology of *Chen caerulescens*, 610–618; *Chen rossii*, 610–618
Nest predation in *Parus atricapillus*, 769–773; *Polioptila californica*, 324–332; *Sialia currucoides*, 443–455; *Tachycineta bicolor*, 443–455
Nest-site selection in *Anas discors*, 381–395; *Anas platyrhynchos*, 381–395; *Catharacta maccormicki*, 638–645; *Chen caerulescens*, 610–618; *Chen rossii*, 610–618; *Corvus corax*, 116–120; *Dendroica townsendi*, 657–667; *Myiarchus cinerascens*, 646–656; *Parus atricapillus*, 769–773; *Parus inornatus*, 646–656; *Picoides borealis*, 778–780; *Polioptila californica*, 324–332; *Sialia currucoides*, 443–455; *Sialia mexicana*, 646–656; *Tachycineta bicolor*, 443–455; *Troglodytes aedon*, 646–656
Nesting success in *Corvus corax*, 116–120; *Falco peregrinus*, 786–791; *Myiarchus cinerascens*, 646–656; *Parus inornatus*, 646–656; *Polioptila californica*, 324–332; *Sialia mexicana*, 646–656; *Troglodytes aedon*, 646–656; *Tyto alba*, 581–592; *Wilsonia citrina*, 619–627

Nestling provisioning in *Pachyptila desolata*, 725–736; *Pelecanoides georgicus*, 725–736
Nettleship, David N., Joanna Burger, and Michael Gochfeld (Eds.), Seabirds on islands: Threats, case studies and action plans (rev.), 157
Nichols, James D., see Krementz, David G., et al.
Nichols, James D., see Loery, Gordon, et al.
Ninox philippensis, 315–323
Nol, Erica, review by, 810–811
Norell, Mark, see Chiappe, Luis, et al.
North Dakota, breeding bird populations, 74–92
Noss, Reed F., Edward T. LaRoe III, and J. Michael Scott, U.S. Department of the Interior Biological Report No. 28. Endangered ecosystems of the United States: A preliminary assessment of loss and degradation (rev.), 160
Nunes, Adauto, L.V., see Miyaki, Cristina Y., et al.
Nur, Nadav, see Chase, Mary K., et al.
Nuthatch, Red-breasted, 298–299
Nutritional ecology of *Larus argentatus*, 467–478; *Phalacrocorax auritus*, 467–478; *Sterna caspia*, 467–478; turacos, 200–211

Oliphant, Lynn W., see Lieske, David J., et al.
Olson, Storrs L., In Memoriam: Beatrice Wetmore, 1910–1997, 751–753
Olson, Storrs L., reviews by, 537–538, 540–541
Olsson, Urban, see Byers, Clive, et al.
Organ development in *Chen caerulescens*, 229–241
Orians, Gordon H., see Beletsky, Les D., and ——
Orientation in *Columba livia*, 405–415
Oring, Lewis W., see Purcell, Kathryn L., et al.
Oring, Lewis W., see Robinson, Julie A., and ——
Oriole, Orchard, 179–191
Oropendola, Montezuma, 570–580
Osmoregulation in *Anas platyrhynchos*, 242–248; *Pygoscelis adeliae*, 488–495
Otus longicornis, 315–323
O. megalotis, 315–323
Ovenbird, 179–191
Owl, Barn, 315–323, 581–592; Giant Scops-, 315–323; Great Horned, 315–323; Luzon Scops-, 315–323; Philippine Hawk-, 315–323; Philippine Scops-, 315–323; Short-eared, 315–323

Pacheco, José Fernando, and Bret M. Whitney, On the origin of some birds collected by George Such, and the type localities of several forms, 303–305
Pachyptila desolata, 725–736
Paleontology, 300–302
Palmer-Ball, Brainard, Jr., The Kentucky breeding bird atlas (rev.), 535–536
Parasite resistance, 179–191
Parent-offspring interactions in *Tachycineta bicolor*, 668–672
Parental investment in *Porphyrio porphyrio*, 291–295; *Thalassoica antarctica*, 333–340; *Turdus migratorius*, 593–600
Parker, Theodore III, 1953–1993, In Memoriam, 110
Parus atricapillus, 298–299, 431–442, 769–773
P. bicolor, 179–191
P. carolinensis, 179–191
P. inornatus, 646–656
Passerina ciris, 179–191
P. cyanea, 179–191
Paternity in *Porphyrio porphyrio*, 291–295
Paynter, Raymond A., Jr., Nearctic passerine migrants in South America (rev.), 307–308
Pedersen, Hans Christian, see Sæther, Bernt-Erik, et al.
Pelecanoides georgicus, 725–736
Penguin, Adélie, 488–495, 638–645; Chinstrap, 47–54
Penry, Huw, Bird atlas of Botswana (rev.), 155–156
Peterjohn, Bruce G., review by, 535–536
Peterson, Roger Tory, Peterson flash guides (rev.), 158
Petrel, Antarctic, 333–340
Petroica australis, 120–126
Phalacrocorax auritus, 467–478
Pheucticus ludovicianus, 179–191, 367–380
Philippines, new sunbirds from, 1–10
Phillips, Allan R., 1914–1996, In Memoriam, 496–499
Phylogenetic placement of *Mimizuku gurneyi*, 315–323; *Mononykus*, 300–302
Phylogeny of owls, 315–323
Physiology, egg composition, 479–487; eggshell formation, 562–569; fat storage, 762–769; immune system, 103–109; incubation, 717–724; muscle composition, 688–694; reproductive, 800–801; salt secretion, 242–248, 488–495; stomach oil, 725–736; thermoregulation, 341–353; vitamin synthesis, 513–516
Picman, Jaroslav, Are cowbird eggs unusually strong from the inside?, 66–73
Picoides borealis, 778–780
Piersma, Theunis, see Camphuysen, Kees, and ——
Pigeon, Homing, 405–415
Pipilo erythrophthalmus, 708–716
Pipit, American, 773–778
Piranga olivacea, 179–191
P. rubra, 179–191
Place, Allen R., see Roby, Daniel D., et al.
Plover, Crowned, 717–724
Plumage coloration in *Cardinalis cardinalis*, 796–800; forest passerines, 179–191
Pluvialis fulva, 521–524
Pochard, Common, 737–747
Polioptila californica, 324–332, 601–609
Poor, Hustace H., 1914–1996, In Memoriam, 287
Population biology of *Anas clypeata*, 737–747; *Aythya ferina*, 737–747; *Aythya fuligula*, 737–747; *Falco peregrinus*, 786–791; *Pipilo erythrophthalmus*, 708–716
Population limitation in Neotropical migrants, 754–762
Population trends, North Dakota birds, 74–92; *Parus atricapillus*, 431–442
Porphyrio porphyrio, 291–295
Potti, Jaime, see Moreno, Juan, et al.

Powell, Margaret C., In Memoriam: Samuel A. Grimes, 1906–1996, 753
Powell, Shawn M., see Braden, Gerald T., et al.
Price, Trevor, review by, 311–312
Prion, Antarctic, 725–736
Protonotaria citrea, 367–380
Psarocolius montezuma, 570–580
Pukeko, 291–295
Purcell, Kathryn L., Jared Verner, and Lewis W. Oring, A comparison of the breeding ecology of birds nesting in boxes and tree cavities, 646–656
Pygoscelis adeliae, 488–495, 638–645
P. antarctica, 47–54

Quail, Japanese, 688–694
Quinn, James S., see Jamieson, Ian G., et al.
Quiscalus major, 179–191
Q. quiscula, 179–191

Ralph, C. John, John R. Sauer, and S. Droege (Tech. Eds.), Monitoring bird populations by point counts (rev.), 811–813
Ratcliffe, N., see Suddaby, D., and ——
Raven, Common, 116–120
Rea, Amadeo M., see Dickerman, Robert W., and ——
Recurvirostra americana, 416–430
Redstart, American, 695–707
Reebs, Stéphan, G., Abiotic factors and preroosting behavior of Greylag Geese: A comment, 140–141
Reed, Lisa M., see Caccamise, Donald F., et al.
Regulus calendula, 55–65
Remsen, J. V., Jr., review by, 147–152
Remsen, J. V., Jr., see Garvin, Mary C., and ——
Reproductive performance in *Anas clypeata*, 737–747; *Aphelocoma ultramarina*, 279–286; *Aythya ferina*, 737–747; *Aythya fuligula*, 737–747; *Sterna paradisaea*, 524–530
Restani, Marco, review by, 312–313
Reynolds, S. James, Uptake of ingested calcium during egg production in the female Zebra Finch (*Taeniopygia guttata*), 562–569
Ricklefs, Robert E., see Choi, In-Ho, and ——
Ridgely, Robert S., and Guy Tudor, The birds of South America, Volume II. The suboscine passerines (rev.), 147–152
Rising, James D., A guide to the identification and natural history of the sparrows of the United States and Canada (rev.), 309–310
Ritter, Shannon, see Brown, Jerram L., et al.
Robin, American, 593–600; New Zealand, 120–126
Robinson, Julie A., and Lewis W. Oring, Natal and breeding dispersal in American Avocets, 416–430
Roby, Daniel D., see Matsuoka, Steven M., et al.
Roby, Daniel D., Jan R. E. Taylor, and Allen R. Place, Significance of stomach oil for reproduction in seabirds: An interspecies cross-fostering experiment, 725–736
Rohwer, Sievert, see Yuri, Tamaki, and ——
Romanowski, Jerzy, see Caccamise, Donald F., et al.
Rosair, David, and David Cottridge, Photographic guide to the shorebirds of the world (rev.), 156
Roselaar, C. S., Songbirds of Turkey: An atlas of biodiversity of Turkish passerine birds (rev.), 160

Sæther, Bernt-Erik, Svein-Håkon Lorentsen, Torkild Tveraa, Reidar Andersen, and Hans Christian Pedersen, Size-dependent variation in the reproductive success of a long-lived seabird, the Antarctic Petrel (*Thalassoica antarctica*), 333–340
Salas-Auvert, Rodolfo, and A. Viloria, Early description of the Black Vulture on the American continent, 513
Salt secretion in *Anas platyrhynchos*, 242–248; *Pygoscelis adeliae*, 488–495
Sanders, Emory W., Jr., see Heinrich, Bernd, et al.
Sandpiper, Western, 456–466
Santa Barbara Software Products, Inc., North American/World BirdArea and BirdBase (rev.), 157–158
Sauer, Gordon C., John Gould the bird man: Associates and subscribers (rev.), 540–541
Sauer, John R., see Ralph, C. John, et al.
Savage, Christopher, see Shurtleff, Lawton L., and ——
Schmitt, Alain, Abiotic factors and preroosting behavior of Greylag Geese: Response to Reebs, 142–143
Schueck, Linda S., see Marzluff, John M., et al.
Schulenberg, Thomas S., see Bates, John M., and ——
Scops-Owl, Giant, 315–323; Luzon, 315–323; Philippine, 315–323
Scott, J. Michael, see Noss, Reed F., et al.
Sealy, Spencer G., see McMaster, D. Glen, and ——
Secondary sexual characters in *Gallus gallus*, 221–228
Sedinger, James S., Mark S. Lindberg, Michael Eichholz, and Nathan Chelgren, Influence of hatch date versus maternal and genetic effects on growth of Black Brant goslings, 129–132
Sedransk, Joseph, see Brown, Jerram L., et al.
Seedeater, Ruddy-breasted, 341–353; Variable, 341–353
Seiurus aurocapillus, 179–191
S. noveboracensis, 179–191
Setophaga ruticilla, 695–707
Sex determination in parrots, 516–520
Sex-role reversal in *Centropus* spp., 800–801
Sexual selection in *Ficedula hypoleuca*, 112–115; *Loxia leucoptera*, 163–178; *Psarocolius montezuma*, 570–580
Sexual size dimorphism in *Psarocolius montezuma*, 570–580; *Streptopelia decaocto*, 22–39
Sheldon, Frederick H., review by, 538
Shirihai, Hadoram, The birds of Israel (rev.), 154–155
Shoveler, Northern, 737–747
Shrike, Loggerhead, 126–129
Shurtleff, Lawton L., and Christopher Savage, The Wood Duck and the Mandarin (rev.), 538–539

Shutler, Dave, review by, 805–807
Sialia currucoides, 443–455
S. mexicana, 646–656
Singing behavior in forest passerines, 55–65
Sitta canadensis, 298–299
Size-dependent reproductive success in *Thalassoica antarctica*, 333–340
Skua, South Polar, 638–645
Skutch, Alexander F., Antbirds and Ovenbirds: Their lives and homes (rev.), 308–309
Slagsvold, Tore, Is there a sexual conflict over hatching asynchrony in American Robins?, 593–600
Slagsvold, Tore, see Birkhead, T. R., et al.
Slagsvold, Tore, see Lifjeld, Jan T., et al.
Smith, Alan R., Atlas of Saskatchewan birds (rev.), 815
Smith, James N. M., review by, 310
Smith, Kimberly G., see Nagy, Laura A., and ——
Smith, Roger N., see Dunk, Jeffrey R., et al.
Sockman, Keith W., Variation in life-history traits and nest-site selection affects risk of nest predation in the California Gnatcatcher, 324–332
Sperm storage in *Ficedula hypoleuca*, 792–796
Sporophila aurita, 341–353
S. minuta, 341–353
Stable isotope analysis in *Larus argentatus*, 467–478; *Phalacrocorax auritus*, 467–478; *Sterna caspia*, 467–478
Starling, European, 688–694
Stattersfield, A. J., see Collar, Nigel J., et al.
Stelgidopteryx serripennis, 249–262
Sterna caspia, 467–478
S. paradisaea, 524–530
Stoleson, Scott H., Double jeopardy and the parameterization of brood reduction models: A comment on Mock and Forbes (1994), 137–140
Stomach oil in *Pachyptila desolata*, 725–736; *Pelecanoides georgicus*, 725–736
Stopover biology of *Calidris mauri*, 456–466; *Catharus fuscescens*, 263–278; *Catharus minimus*, 263–278; *Catharus ustulatus*, 263–278, 695–707; *Dendroica magnolia*, 695–707; *Dumetella carolinensis*, 695–707; *Hylocichla mustelina*, 263–278; *Setophaga ruticilla*, 695–707; *Vireo griseus*, 695–707; *Vireo olivaceus*, 695–707
Stouffer, Philip C., Interspecific aggression in *Formicarius* antthrushes? The view from central Amazonian Brazil, 780–785
Stouffer, Philip C., see Caccamise, Donald F., et al.
Streptopelia decaocto, 22–39
Sturnus vulgaris, 688–694
Such, George, bird collections, 303–305
Suddaby, D., and N. Ratcliffe, The effects of fluctuating food availability on breeding Arctic Terns (*Sterna paradisaea*), 524–530
Sun, Chin, and Timothy C. Moermond, Foraging ecology of three sympatric turacos in a montane forest in Rwanda, 396–404
Sun, Chin, Timothy C. Moermond, and Thomas J. Givnish, Nutritional determinants of diet in three turacos in a tropical montane forest, 200–211
Sunbird, Apo, 1–10; Lina's, 1–10
Survivorship in *Parus atricapillus*, 431–442; *Pluvialis fulva*, 521–524; *Recurvirostra americana*, 416–430; *Wilsonia pusilla*, 354–366
Swallow, Northern Rough-winged, 249–262; Tree, 367–380, 443–455, 668–672
Switzer, Paul. V., see Cristol, Daniel A., et al.
Syrinx structure of *Streptopelia decaocto*, 22–39

Tachycineta bicolor, 367–380, 443–455, 668–672
Taeniopygia guttata, 562–569
Tanager, Scarlet, 179–191; Summer, 179–191
Tauraco schuettii, 200–211, 396–404
Taylor, Jan R. E., see Roby, Daniel D., et al.
Teal, Blue-winged, 381–395
Techniques, avian genotyping, 126–129; TOBEC, 762–769
Teeter, R. G., see Dabbert, C. B., et al.
ten Cate, Carel, see Ballintijn, Mechteld R., and ——
Tern, Arctic, 524–530; Caspian, 467–478
Territoriality in *Formicarius* antthrushes, 780–785; turacos, 396–404; woodpeckers, 778–780
Territory selection in *Aquila chrysaetos*, 673–687; *Dendroica townsendi*, 657–667
Testicular asymmetry in *Centropus* spp., 800–801; *Gallus gallus*, 221–228
Testis function in *Centropus* spp., 800–801
Thalassoica antarctica, 333–340
Thamnophilus ambiguus, 303–305
T. leachii, 303–305
Thermal stress in *Colinus virginanus*, 103–109
Thermoregulation in *Sporophila* spp., 341–353; *Vanellus coronatus*, 717–724
Thomas, Dana L., see Matsuoka, Steven M., et al.
Thrush, Gray-cheeked, 263–278; Swainson's, 179–191, 263–278, 695–707; Wood, 179–191, 263–278
Thryothorus carolinensis, 179–191
Tiger-Heron, Fasciated, 303–305
Tigrisoma fasciatum, 303–305
Titmouse, Plain, 646–656; Tufted, 179–191
TOBEC, 762–769
Towhee, Eastern, 708–716
Treehunter, Pale-browed, 303–305
Troglodytes aedon, 367–380, 646–656
Trost, C. H., review by, 539–540
Tucker, G. M., and M. F. Heath, Birds in Europe: Their conservation status (rev.), 310–311
Tudor, Guy, see Ridgely, Robert S., and ——
Turaco, Black-billed, 200–211, 396–404; Great Blue, 200–211, 396–404; Ruwenzori, 200–211, 396–404
Turdus migratorius, 593–600
Tveraa, Torkild, see Sæther, Bernt-Erik, et al.
Type specimens from Brazil, 303–305
Tyto alba, 315–323, 581–592

Unitt, Philip, see Mundy, Nicholas I., et al.

Vanellus coronatus, 717–724
V. vanellus, 507–512
Veery, 179–191, 263–278
Vekasy, Mark S., see Marzluff, John M., et al.
Verhulst, Simon, and Popko Wiersma, Is begging cheap?, 134
Verner, Jared, see Purcell, Kathryn L., et al.
Vesall, Jean M., reviews by, 159, 160
Viloria, A., see Salas-Auvert, Rudolfo, and ——
Viñuela, Javier, Laying order affects incubation duration in the Black Kite (*Milvus migrans*): Counteracting hatching asynchrony?, 192–199
Vireo griseus, 695–707
V. olivaceus, 179–191, 695–707
Vireo, Red-eyed, 179–191, 695–707; White-eyed, 695–707
Vitamin synthesis in passerines, 513–516
Vocalizations of *Hippolais* spp., 40–46; *Phylloscopus* spp., 40–46; *Streptopelia decaocto*, 22–39; *Tachycineta bicolor*, 668–672
Vulture, Black, 513

Wajntal, Anita, see Miyaki, Cristina Y., et al.
Walke, Leah S., see Cristol, Daniel A., et al.
Warbler, Hooded, 619–627; Magnolia, 695–707; Prothonotary, 367–380; Townsend's, 657–667; Yellow, 212–220, 367–380; Yellow-rumped, 55–65; Wilson's, 354–366
Ward, David, see Downs, Colleen T., and ——
Warkentin, Ian G., see Lieske, David J., et al.
Warnock, Nils, see Butler, Robert W., et al.
Warnock, Nils, see Johnson, Oscar W., et al.
Waterfowl, brood amalgamation, 11–21; survival rates, 93–102
Waterthrush, Northern, 179–191
Weather and nesting success in *Falco peregrinus*, 786–791; *Thalassoica antarctica*, 333–340
Weathers, Wesley W., Energetics and thermoregulation by small passerines of the humid, lowland tropics, 341–353
Weathers, Wesley W., Peter J. Hodum, and David J. Anderson, Is the energy cost of begging by nestling passerines surprisingly low?, 133
Webster, Michael S., Extreme sexual size dimorphism, sexual selection, and the foraging ecology of Montezuma Oropendolas, 570–580
Wetmore, Beatrice, 1910–1997, In Memoriam, 751–753
Wheeler, Brian K., and William S. Clark, A photographic guide to North American raptors (rev.), 306–307
Whitmore, Robert C., see Bell, Jennifer L., and ——
Whitney, Bret M., see Pacheco, José Fernando, and ——
Wiersma, Popko, see Verhulst, Simon, and ——
Wilkins, Charles A., see Gutzwiller, Kevin J., et al.
Williams, Heather, review by, 804–805
Williams, Tony D., see Butler, Robert W., et al.
Wilsonia citrina, 619–627
W. pusilla, 354–366
Wiltschko, Roswitha, see Beason, Robert C., et al.
Wiltschko, Wolfgang, see Beason, Robert C., et al.
Winker, Kevin, review by, 307–308
Wood, Merrill, 1908–1992, In Memoriam, 111
Woodpecker, Red-bellied, 778–780; Red-cockaded, 778–780
Woodrey, Mark, and Frank R. Moore, Age-related differences in the stopover of fall landbird migrants on the coast of Alabama, 695–707
Woodruff, David S., see Mundy, Nicholas I., et al.
Wren, Carolina, 179–191; House, 367–380, 646–656

Yellowthroat, Common, 367–380
Yong, Wang, and Frank R. Moore, Spring stopover of intercontinental migratory thrushes along the northern coast of the Gulf of Mexico, 263–278
Yosef, Reuven, review by, 154–155
Yosef, Reuven, and F. J. Lohrer (Eds.), Shrikes (Laniidae) of the world: Biology and conservation (rev.), 159
Yuri, Tamaki, and Sievert Rohwer, Molt and migration in the Northern Rough-winged Swallow, 249–262

Zarriello, Thomas J., see Marzluff, John M., et al.
Zink, Robert M., reviews by, 157–158, 158, 158–159

DATE OF ISSUE (Vol. 114, No. 4): 6 October 1997